PMP40280 REV E1 Bill of Materials



Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C4, C8, C11,		3300pF	GRM188R71H332KA01D	MuRata	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0603	0603
C12, C13, C14,		-				
C15						
C2, C16, C21,	14	1uF	C1608X7R1C105K080AC	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603	0603
C23, C27, C29,						
C59, C61, C63,						
C65, C66, C73,						
C74, C75						
C3, C6, C9, C17,	16	0.1uF	C1608X7R1E104K080AA	TDK	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, 0603	0603
C18, C22, C24,						
C28, C30, C60,						
C62, C64, C67,						
C68, C76, C77						
C5, C7, C10	3	10uF	C2012X5R1V106K085AC	TDK	CAP, CERM, 10 μF, 35 V, +/- 10%, X5R, 0805	0805
C19, C20, C25,	8	0.1uF	08055C104JAT2A	AVX	CAP, CERM, 0.1 µF, 50 V, +/- 5%, X7R, 0805	0805
C26, C31, C32,						
C33, C34						
C35	1	0.1uF	GRM188R61C104KA01D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X5R, 0603	0603
C36, C45	2	22uF	GRM31CR61A226ME19L	MuRata	CAP, CERM, 22 μF, 10 V, +/- 20%, X5R, 1206	1206
C37	1	10uF	293D106X9050E2TE3	Vishay-Sprague	CAP, TA, 10 μF, 50 V, +/- 10%, 0.8 ohm, SMD	7343-43
C38, C49, C57	3	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C39, C40	2	4.7uF	GRM32ER71H475KA88L	MuRata	CAP, CERM, 4.7 µF, 50 V, +/- 10%, X7R, 1210	1210
C41	1	27pF	C0805C270J5GACTU	Kemet	CAP, CERM, 27 pF, 50 V, +/- 5%, C0G/NP0, 0805	0805
C42	1	8200pF	GRM188R71E822KA01D	MuRata	CAP, CERM, 8200 pF, 25 V, +/- 10%, X7R, 0603	0603
C43	1	1500pF	CC0805KRX7R9BB152	Yageo America	CAP, CERM, 1500 pF, 50 V, +/- 10%, X7R, 0805	0805
C44	1	0.1uF	08053C104KAT2A	AVX	CAP, CERM, 0.1 μF, 25 V, +/- 10%, X7R, 0805	0805
C46	1	47uF	C3216X5R1E476M160AC	TDK	CAP, CERM, 47 μF, 25 V, +/- 20%, X5R, 1206_190	1206_190
C47, C53	2	2200pF	GRM188R71C222KA01D	MuRata	CAP, CERM, 2200 pF, 16 V, +/- 10%, X7R, 0603	0603
C48, C54, C56	3	1uF	GRM188R61A105KA61D	MuRata	CAP, CERM, 1 μF, 10 V, +/- 10%, X5R, 0603	0603
C50, C58	2	2.2uF	GRM21BR71A225KA01L	MuRata	CAP, CERM, 2.2 µF, 10 V, +/- 10%, X7R, 0805	0805
C51	1	4.7uF	GRM188R60J475KE19D	MuRata	CAP, CERM, 4.7 µF, 6.3 V, +/- 10%, X5R, 0603	0603
C52, C55	2	10uF	GRM219R61E106KA12D	MuRata	CAP, CERM, 10 μF, 25 V, +/- 10%, X5R, 0805	0805
C69, C70	2	24pF	GRM1885C1H240JA01D	MuRata	CAP, CERM, 24 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C71, C72		10pF	GRM1885C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
D1, D2, D3, D4,	8	15V	SMAJ15CA	Littelfuse	Diode, TVS, Bi, 15 V, 400 W, SMA	SOD-323
D5, D6, D7, D8						
D9, D12, D13,	4	5V	CDSOD323-T05SC	Bourns	Diode, TVS, Bi, 5 V, 400 W, SOD323, 2-Leads, Body 1.9x1.45mm, No	SOD323, 2-Leads,
D16					Polarity Mark	Body 1.9x1.45mm, No
						Polarity Mark
D10, D11, D14, D15	4	7V	CD143A-SR70	Bourns	ESD Suppressor Diode Arrays, 7V, SMD	3.04X1.22X1.4
D17, D18	2	40V	B340A-13-F	Diodes Inc.	Diode, Schottky, 40 V, 3 A, SMA	SMA
D19		27V	SZMMBZ27VCLT1G	ON Semiconductor	Diode, TVS, Uni, 27 V, 40 W, SOT-23	SOT-23
D20		3.3V	BZT52C3V3T-7	Diodes Inc.	Diode, Zener, 3.3 V, 300 mW, SOD-523	SOD-523

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Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
D21, D23, D25,	6	Green	LG L29K-G2J1-24-Z	OSRAM	LED, Green, SMD	1.7x0.65x0.8mm
D27, D30, D31						
D22, D24, D26	3	5V	ESD9L5.0ST5G	ON Semiconductor	Diode, TVS, Uni, 5 V, 0.15 W, AEC-Q101, SOD-923	SOD-923
D28, D29	2	20V	MBR0520LT1G	ON Semiconductor	Diode, Schottky, 20 V, 0.5 A, SOD-123	SOD-123
D32, D33, D34,	20		TPD1E04U04DPYR	Texas Instruments	1 Channel ESD Protection Device for Super-Speed (up to 6 GBPS)	DPY0002A
D35, D36, D37,					Interface, DPY0002A	
D38, D39, D40,					111011000, 21 1000271	
D41, D42, D43,						
D44, D45, D46,						
D44, D43, D46, D47, D48, D49,						
D50, D51	4		TOW 400 07 T C	Compton	Handan O.S.A. same O.A. Tim TH	Handan O.54 man
J1	1		TSW-102-07-T-S	Samtec	Header, 2.54 mm, 2x1, Tin, TH	Header, 2.54 mm,
						2x1, TH
J2, J4, J5	3		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
J3	1		SSW-106-23-F-D	Samtec	Receptacle, 2.54mm, 6x2, Gold, TH	Receptacle, 2.54mm,
						6x2, SMT
J6	1		PJ-102AH	CUI Inc.	DC POWER JACK, R/A, TH	DC POWER JACK,
						R/A, TH
J7	1		SSW-108-01-T-D	Samtec	Receptacle, 2.54 mm, 8x2, Tin, TH	Receptacle, 2.54mm,
						8x2, TH
J8, J10, J12, J14	4		SSW-115-03-G-D-RA	Samtec	Receptacle, 2.54 mm, 15x2, Gold, R/A, TH	Receptacle, 2.54 mm,
00, 010, 012, 014	-		100000000000000000000000000000000000000	Cameo	1000ptable, 2.04 mm, 10x2, 00ld, 10x1, 111	15x2, R/A, TH
J9, J11, J13, J15	4		SSW-110-23-S-D	Samtec	Receptacle, 2.54mm, 10x2, Gold, TH	10x2 Receptacle
	<u> </u>					
J16, J17, J18,	6		10-84-4040	Molex	Header (shrouded), 6.35mm, 4x1, TH	Header 4x1 6.35 mm
J19, J20, J21			0004 404 00 5 0		D + 1 054 + 4 0 0 H TH	15 1 051
J22	1		SSW-104-23-F-D	Samtec	Receptacle, 2.54mm, 4x2, Gold, TH	Receptacle, 2.54mm,
						4x2, SMT
L1, L2, L3, L4, L5,	16	1000 ohm	MMZ1608B102CTA00	TDK	Ferrite Bead, 1000 ohm @ 100 MHz, 0.3 A, 0603	0603
L6, L7, L8, L9,						
L10, L11, L12,						
L13, L17, L18,						
L19						
L14	1	8.2uH	SRN8040-8R2Y	Bourns	Inductor, Drum Core, Ferrite, 8.2 µH, 3.7 A, 0.045 ohm, SMD	Inductor, 8x4x8mm
L15	1	220 ohm	BLM21PG221SN1D	MuRata	Ferrite Bead, 220 ohm @ 100 MHz, 2 A, 0805	0805
L16	1	2.2uH	VLP8040T-2R2N	TDK	Inductor, Unshielded Drum Core, Ferrite, 2.2 µH, 6.7 A, 0.015 ohm, SMD	Inductor, 8x4x8mm
					, , , , , , , , , , , , , , , , , , ,	
R1, R3, R5, R6,	26	47	CRCW060347R0JNEA	Vishay-Dale	RES, 47, 5%, 0.1 W, 0603	0603
R7, R8, R10, R11,		J ⁻ ′	OKOW 000347 KOSINEA	Visitay Baic	11.05, 47, 570, 6.1 44, 5005	0000
R31, R36, R37,						
R38, R39, R40,						
R41, R42, R43,						
R44, R45, R46,						
R47, R48, R49,						
R50, R53, R54						
R2, R4, R9, R13,	8	2.0k	CRCW06032K00JNEA	Vishay-Dale	RES, 2.0 k, 5%, 0.1 W, 0603	0603
R14, R15, R16,						
R17		<u> </u>				<u> </u>
R12	1	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
1112						

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Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R19	1	26.7k	CRCW060326K7FKEA	Vishay-Dale	RES, 26.7 k, 1%, 0.1 W, 0603	0603
R20	1	1.56k	RT0603BRD071K56L	Yageo America	RES, 1.56 k, 0.1%, 0.1 W, 0603	0603
R21	1	33.2k	CRCW060333K2FKEA	Vishay-Dale	RES, 33.2 k, 1%, 0.1 W, 0603	0603
R22, R24, R28,	6	1.2k	CRCW06031K20JNEA	Vishay-Dale	RES, 1.2 k, 5%, 0.1 W, 0603	0603
R30, R51, R52						
R23, R29	2	31.6k	CRCW060331K6FKEA	Vishay-Dale	RES, 31.6 k, 1%, 0.1 W, 0603	0603
R25, R26, R32	3	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R27	1	76.8k	CRCW060376K8FKEA	Vishay-Dale		0603
R33	1	23.7k	CRCW060323K7FKEA	Vishay-Dale	RES, 23.7 k, 1%, 0.1 W, 0603	0603
R34, R35, R62, R63, R64, R65	6	10.0k	RC0603FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R55	1	120	RC0603FR-07120RL	Yageo America	RES, 120, 1%, 0.1 W, 0603	0603
R56, R60, R61, R66, R67, R68, R69	7	0	MCR10EZPJ000	Rohm	RES, 0, 5%, 0.125 W, 0805	0805
R57, R58, R59	3	4.7k	CRCW06034K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.1 W, 0603	0603
S1, S2	2		B3SL-1022P		SWITCH TACTILE SPST-NO 0.05A 12V	6.2x5.1x6.5mm
T1	1	475uH	760390015	Wurth Elektronik	Transformer, 475 uH, SMT	7.14x6.73mm
U1	1		REF2041AIDDCR	Texas Instruments	DUAL OUTPUT VOLTAGE REFERENCE 4.1V, DDC0005A	DDC0005A
U2	1		ADS1248IPWR	Texas Instruments	24-Bit Analog-to-Digital Converters for Temperature Sensors, PW0028A	PW0028A
U3	1		CD4051BQPWRQ1	Texas Instruments	CMOS ANALOG MULTIPLEXER/DEMULTIPLEXER WITH LOGIC-LEVEL CONVERSION, PW0016A	PW0016A
U4, U5	2		DAC80004IPW14	Texas Instruments		PW0014A
U6	1		TPD4E002DRL2	Texas Instruments	Low-Capacitance Array with + / - 15 kV ESD Protection, 4 Channels, -40 to +85 degC, 5-pin SOT (DRL), Green (RoHS & no Sb/Br)	DRL0005A
U7	1		TPS54332DDAR	Texas Instruments	3.5-A, 28-V, 1-MHz, Step-Down DC-DC Converter With Eco-Mode, DDA0008H	DDA0008H
U8	1		TPS563200DDCR	Texas Instruments	4.5V to 17 V Input, 3-A Synchronous Step-Down Voltage Regulator in SOT-23, DDC0006A	DDC0006A
U9, U12	2		TPS79901DRVT	Texas Instruments	Single Output High PSRR LDO, 200 mA, Adjustable 1.2 to 6.5 V Output, 2.7 to 6.5 V Input, with Low IQ, 6-pin SON (DRV), -40 to 85 degC, Green (RoHS & no Sb/Br)	DRV0006A
U10	1		TPS72301DBVR	Texas Instruments	Single Output LDO, 200 mA, Adjustable -10 to -1.2 V Output, -10 to -2.7 V Input, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
U11	1		TL7660CD	Texas Instruments	CMOS Voltage Converter, 1.5 to 10 V, -40 to 85 degC, 8-pin SOIC (D0008A), Green (RoHS & no Sb/Br)	D0008A
U13	1		TM4C123GH6PZIR	Texas Instruments	Tiva C Series Microcontroller, PZ0100A	PZ0100A
U18	1		TPS76350DBVR	Texas Instruments	Single Output LDO, 150 mA, Fixed 5 V Output, 2.7 to 10 V Input, with Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
U19	1		SN6501DBVR	Texas Instruments	Transformer Driver for Isolated Power Supplies, DBV0005A	DBV0005A
U20	1		ISO1050DW	Texas Instruments	Isolated CAN Transceiver, -55 to 105 degC, 16-pin SOIC (DW), Green (RoHS & no Sb/Br)	DW0016A
U21	1		TPD2E1B06DRLR	Texas Instruments		DRL0006A
Y1	1		MS3V-T1R 32.768KHZ +/- 20PPM 12.5PF	Micro Crystal AG	Crystal, 32.768kHz, 12.5pF, SMD	1.4x1.4x5.0mm SMD
Y2	1		ABM3-16.000MHZ-D2Y-T	Abracon Corporation	Crystal, 16 MHz, 18 pF, SMD	ABM3

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Designator Quantity Value PartNumber Manufacturer Description PackageReference

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